

REMARKS

Pending claims 1-4 have been rejected in this application. The Examiner is respectfully requested to reconsider and withdraw the outstanding rejection(s) in view of the remarks contained herein. Claims 1-4 will remain pending in this application.

REJECTION UNDER 35 U. S. C. § 102

Claims 1-4 were rejected under 35 U. S. C. § 102(a) as allegedly anticipated by Admitted Prior Art (APA). Applicant respectfully submits that this rejection is traversed without the need for substantive changes in the claims. The original claims recite the following patentably distinguishing features: “an ID mark is formed in the interior of the base plate at a predetermined position....” That is, the present invention features a semiconductor wafer and substrate having an ID mark in the interior of the base plate. See Figs. 1 and 3 of Applicant’s specification. The APA fails to teach or suggest at least these features and the resulting benefits.

The APA discusses a semiconductor wafer and a substrate that have an ID mark on the surface of a base plate. The paragraph on page 1, line 9-18 describes the merits and reasons for having an ID mark. Thereafter, the paragraph bridging pages 1 and 2 describes using a laser beam to form the mark on the base plate’s surface.

To the contrary, Applicant has discovered that a technique such as disclosed by JP 11-26781 can be used to form the ID mark in the interior of the base plate of the claimed semiconductor wafer and substrate. See Applicant’s specification at page 3, lines 12-19. Applicant has made this discovery even though, according to the English Abstract, JP 11-26781 discloses interior marking of an optical transmitting material such as glass, as opposed to the material that Applicant marks. The APA introduced in Applicant’s specification does not teach

or suggest the formation of an ID mark in the interior of the base plate, as required in the present claims.

Further, Applicant submits that ID marks formed on the surface of a base plate using the method taught in the APA produces irregularities on the surface of the base plate (see Applicant's specification from page 1, line 30 to page 2, line 5). These irregularities can create problems because contaminants (dust) may enter into the irregularities, thereby making the ID mark difficult to be detect (read) or possibly causing contamination of the clean room. However, the present invention eliminates the problems caused by having irregularities formed on the surface of the base plate because the ID mark is instead formed in the interior of the base plate.


For at least the above reasons, Applicant respectfully submits that cited prior art fails to inherently or explicitly disclose each and every feature of the present invention as set forth in the present invention. As such, Applicant submits that the claims 1-4 are not anticipated under 35 U.S.C. §102 and rather are in condition for allowance.

CONCLUSION

Applicant respectfully submits that this Amendment and the above remarks obviate the outstanding rejection in this case, thereby placing the application in condition for immediate allowance. Allowance of this application is earnestly solicited.

If any fees under 37 C. F. R. §§ 1.16 or 1.17 are due in connection with this filing, please charge the fees to Deposit Account No. 02-4300, Order No. 033773M054.

Respectfully submitted,
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Listing of Claims

1. (Original) A semiconductor wafer having circuits formed on the front surface of a base plate, wherein an ID mark is formed in the interior of the base plate at a predetermined position devoid of the circuits.
2. (Original) The semiconductor wafer according to claim 1, wherein the ID mark is formed by converging a laser beam at a focal point in the interior of the base plate.
3. (Original) A substrate having a workpiece holding area in a base plate, wherein an ID mark is formed in the interior of the base plate at a predetermined position.
4. (Original) The semiconductor wafer according to claim 3, wherein the ID mark is formed by converging a laser beam at a focal point in the interior of the base plate.